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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,282	03/30/2001	Teruhiro Yamada	263/123	6783

26389 -7590 08/03/2004

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EXAMINER

LAO, TIM P

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 08/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/823,282

Applicant(s)

YAMADA ET AL.

Examiner

Tim Lao

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22 is/are rejected.
- 7) ☒ Claim(s) 23-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. The indicated allowability of claim 22 is withdrawn in view of the newly discovered reference(s) to Merrill et al. (U.S. Patent Pub. 2002/0008703). Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (U.S. Patent 6,615,172, hereinafter "Bennett") in view of Merrill et al. (U.S. Patent Pub. 2002/0008703, hereinafter "Merrill").

Claim(s)  
22

Bennett shows:

A user support apparatus (see Abstract; col.6, ll.27-30) comprising:

an utterance identification block (Fig.1: SRE server-side **182**, Text-to-Query Converter **184**, Database Processor & Interface **186**, and Natural Language Engine **190**) which has an electronic collection of user utterances (e.g., a set of potential questions corresponding to the user's query, col.25, ll.1-44; Fig.11a, 11b), and identifies a content of a given user utterance (e.g., identifies the content posed by the user question or query, col.11, ll.32-34); and

{1. Blocks **182**, **184**, **186**, and **190** act as an utterance identification block, e.g., it receives the

*user utterance, parses the content, and understands the content lexically or morphologically. (col.12, ll.1-10)*

*2. The set of potential questions, i.e., the collection of user utterances, corresponding to the user query is located on the Structured Query Language (SQL) database (Fig.4C: **711C**) of DB engine server **186** (col.11, ll.6-9; col.25, ll.2-10; col.26, ll.30-32) whereas the answer to the most likely candidate of questions is located on the Natural Language Query System (NLQS) Database **188** (col.11, ll.9-11; Fig.4C: **717**; col.29, ll.29).*

*3. The DB Processor **186** searches the utterance using SQL Search Service (Fig.10: **1010**). The result identifies the content, e.g., by returning the best suitable question that matches the question corresponding to the user query.*

*4. The collection of utterances is stored in the Full-Text Catalog (Fig.10: **1013**).}*

a response block (Fig.1: NLQS database **188**, Animated Character to Guide User **157**, and Text-to-Speech Engine **159**) which has an electronic collection of action patterns (e.g., different interactions of the animated character **1440** in responding to the user, col.35, ll.64-67; col.20, ll.61-67; col.21, ll.1-3) for a first agent for responding to user utterances, and enables the first agent to respond to the user utterances; (col.35, ll.64-67; col.36, ll.1-12, ll.33-51; col.20, ll.45-67; col.21, ll.1-14)

Bennett does not show:

the utterance identification block has an additional collection of anticipated utterances to which the first agent should react among utterances that a second agent make to the user, and identifies a content of an utterance of the second agent if the utterance of the second agent exists in the additional utterance collection, and

the response block has an additional collection of action patterns for the first agent for reacting to the utterances of second agent, and enables the first agent to occasionally react to the utterances of the second agent.

Merrill teaches:

a speech recognition block (p.1, ¶ 0008; p.4, ¶ 0052, 0053) has a collection anticipated utterances to which the first agent (e.g., animated character "Merlin") should react to (e.g., interrupt) the utterances of a second agent (e.g., animated character "Genie"). (p.12,

	<p>¶ 0147; p.22, ¶ 0375-382; p.1, ¶ 0003)</p> <p>a scripting engine block (Fig.12: 506) has an collection of action patterns (e.g., behaviors of characters) for the first agent for reacting to the utterances of second agent, and enables the first agent to occasionally react to the utterances of the second agent. (p.22, ¶ 0367; p.22, col.2, ¶ 0382, last 4 lines).</p> <p>It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bennett's method of agent to user interaction to include Merrill's teaching of agent to agent interaction in order to simulate a life-like interaction between the agent and the user in which the interaction can be more entertaining. (Merrill: p.1, ¶ 0003)</p>
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### ***Allowable Subject Matter***

<p>4. Claims 23-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.</p> <p>5. The following is a statement of reasons for the indication of allowable subject matter:</p>	
<p>Claim(s) 23</p>	<p><u>The prior art fails to show:</u></p> <p>The apparatus of claim 22, wherein the additional utterance collection is incorporated into the user utterance collection, and the user utterance and the second agent utterance are matched with the integrated user utterance collection without any discrimination, when a process of the utterance identification block comes to at least a final stage.</p>
<p>Claim(s) 24</p>	<p><u>The prior art fails to show:</u></p> <p>The apparatus of claim 22, wherein both the first agent and the second agent are implemented on this apparatus, and the utterance identification block and the response block are symmetrically provided for the first agent and the second agent, and while the second agent mainly responds to the user instead of the first agent, the first agent occasionally reacts</p>

	to the utterances of the second agent.
Claim(s) 25	<p><u>The prior art fails to show:</u></p> <p>A user support system comprising a plurality of said user support apparatus of claim 22 connected to a network as independent network nodes, wherein each of the apparatus is provided according to each specialized field, and the additional utterance collection, the agent action collection, and the additional action collection of each user support apparatus are generated according to each specialized field.</p>
Claim(s) 26	Allowable based on dependency.
Claim(s) 27	Allowable based on dependency.
Claim(s) 28	Allowable based on dependency.
Claim(s) 29	Allowable based on dependency.
Claim(s) 30	Allowable based on dependency.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Lao whose telephone number is 703-305-8955.

The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Lao  
Examiner  
Art Unit 2655

TL  
07/28/04

W. R. YOUNG  
PRIMARY EXAMINER